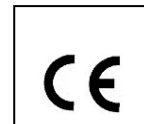


XX170-01-02

MODEL V-DA-8-16
16-CHANNEL VIDEO
DISTRIBUTION AMPLIFIER



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Dear Valued Customer:

Thank you for selecting Vicon systems and products for your video needs.

Since Vicon's beginning in 1967, our only business has been the design, engineering, and production of the highest quality video systems and equipment for use in a wide variety of security, safety, control, surveillance, and communication applications.

We stand behind the quality and dependability of every product with an industry leading Beneficial Use warranty.

If you are not satisfied with a Vicon product or service, I would like to know. Your complete satisfaction is the mission of every Vicon employee.

Sincerely,

Kenneth M. Darby
President

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Items delivered

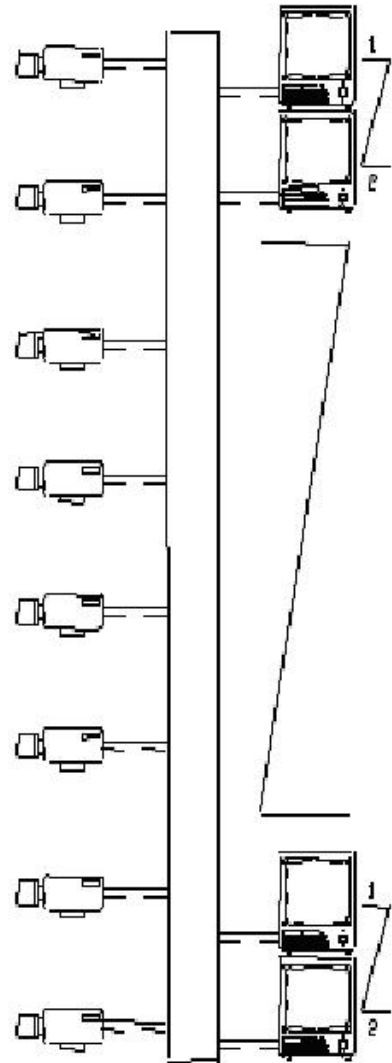
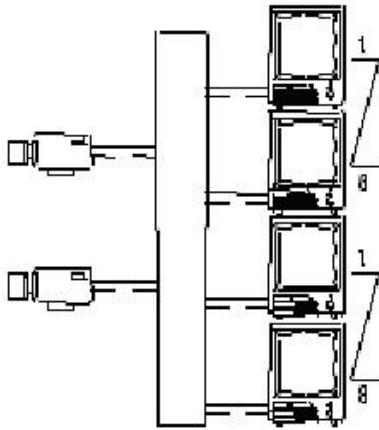
V-DA-8-16: Video distribution amplifier that can be rack mounted (1 RU) or set on a desk. A separate power supply is provided with the unit.

Tips for mounting

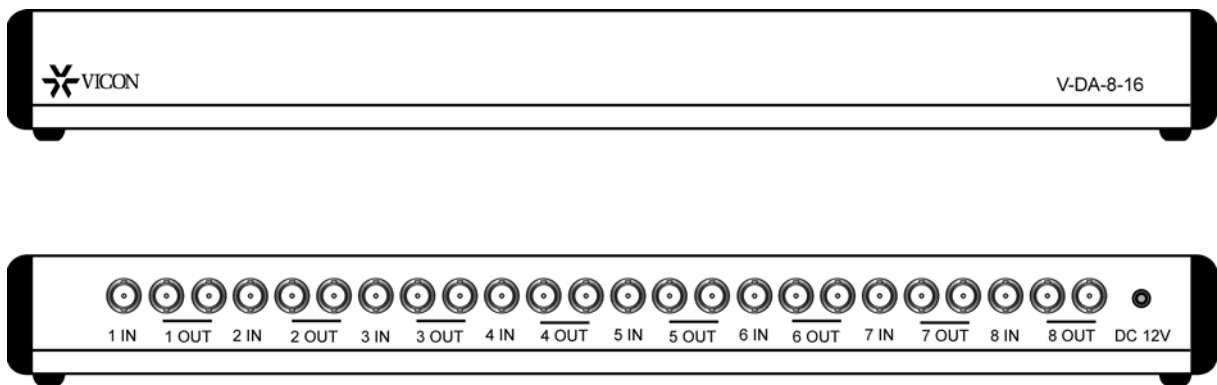
- Install the video distribution amplifier indoors only.
- To avoid overheating:
 - do not expose the unit to direct sunlight
 - keep sufficient distance from direct heat sources
 - leave enough space (at least 1 RU) in the rack between units for cooling
- Do not install the unit at damp, oily or dusty locations.
- Do not expose the unit to strong vibrations.

System overview

Configuration options:



Connecting and Operating



The V-DA-8-16 can be configured as follows:

- 2 video inputs with 8 outputs each
- 4 video inputs with 4 outputs each
- 8 video inputs with 2 outputs each
- 1 video input with 16 outputs

Internal Adjustments

The V-DA-8-16 contains two identical circuit card boards that can be configured to provide different combinations of video inputs and video outputs. This is accomplished by setting jumpers on the boards, which are located inside the unit.

The factory setting is 4 video inputs and 4 video outputs.

To change the inputs and outputs, you must open the unit and set the jumpers as follows:

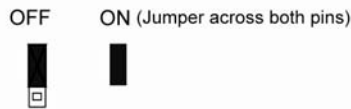
1. Disconnect the unit from power supply.
2. Loosen and remove the allen screws from each end cap using the supplied allen wrench.

CAUTION: Use care when separating the top and bottom housings to ensure that no internal wiring is disconnected or damaged.

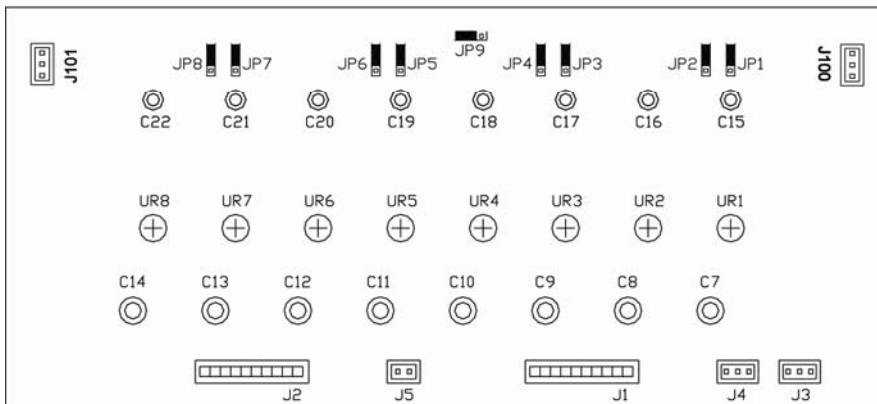
3. Separate the top and bottom housings.
4. Set the jumpers on both boards as follows:

Note: The boards are connected by a jumper cable to jumpers J100 and J101, which combines the boards. Disconnecting the cable will create two separate amplifiers.

Configuration	Jumpers On	Jumpers Off	Notes
8 video inputs with 2 outputs each	JP2, JP4, JP6, JP8	JP1, JP3, JP5, JP7, JP9	J100 and J101 disconnected.
4 video inputs with 4 outputs each	JP1, JP2, JP3, JP5, JP6, JP7	JP4, JP8, JP9	J100 and J101 disconnected.
2 video inputs with 8 outputs each	JP1, JP2, JP3, JP5, JP7, JP9	JP4, JP6, JP8	J100 and J101 disconnected.
1 video input with 16 outputs	JP1, JP2, JP3, JP5, JP7, JP9 Note: One board must have JP2 set to off.	JP4, JP6, JP8	J100 and J101 connected.



All jumpers shown in OFF position



Troubleshooting

Error	Cause
Video outputs are not all available (e.g. 1 video input 6 video outputs)	The jumper on the circuit board is set to duplicated number of video inputs/outputs
One or several monitors have stripes in the picture	These distortions are caused by hum in the picture which is a result of connecting several monitors to different potentials. <ol style="list-style-type: none">1. Connect all devices to the same phase2. Use galvanic transformers between monitor and mains phase3. Use an additional optocoupler for each transmission line
The monitors have no picture	<ol style="list-style-type: none">1. Video signal lines interrupted or defective; check all coaxial cables and BNC plugs2. Power supply to camera interrupted; check operating voltage at camera3. The video distributor is off:<ol style="list-style-type: none">a. Check and/or replace mains fuse

Should none of the above remedies be successful, please contact your authorized dealer with a detailed failure description.

Maintenance and care

Before starting to clean the device, disconnect the unit from power supply. Never use any water or fluid to clean the device for reasons of electronic safety. Never put the unit under water. To clean use a soft dry cloth. Never open the unit to clean inside. This may only be done by authorized personnel according to the local safety regulations. If the device will be handed over to third parties, make sure to include these operating instructions.

Technical specifications

Number of video inputs and outputs	2 video inputs with 8 outputs each 4 video inputs with 4 outputs each 8 video inputs with 2 outputs each 1 video input with 16 outputs
Frequency	20 MHz / - 3 dB
Application	indoor
Scanning system	CCIR / PAL 625 lines, 50 Hz EIA / NTSC 525 lines, 60 Hz
Signal-to-noise ratio	> 56 dB
Input signal	(F)BAS 1 V _{pp} / 75 Ω
Output signal	(F)BAS 1 V _{pp} / 75 Ω
Operating voltage	12 V DC
Consumption	2.4 W
Operating temperature	14° to 140° F (- 10° to + 60° C)
Air humidity	up to 90 %
IP rating / class	IP40/cl. III
MTBF	120.000 hours
EMI	acc. to EN 50081-1, EN 55011 class B
EMC	acc. to EN 50082-2, EN 61000-4-2, -3,-4, -6, EN 50204
Safety	acc. to EN 60950, EN 60065
Housing finish	Aluminum
Housing colour	Aluminum
Weight	7 lb (3200 g)
Dimensions (W x H x D)	17.3 in L x 1.85 in H x 5 in D (440 x 47 x 128 mm) 19" (1 HU)
Connections Video IN Video OUT Power	BNC-F BNC-F Low voltage socket
Accessories included	Operating manual, power supply

Technical Support

Should you have any problems during installation you can reach our Technical Hotline at the following telephone number: 1-800-34-VICON (1-800-348-4266)

Your notes

Coaxial Cable Recommendations

⚠ Caution: Careful selection of proper cable is essential to obtain the best performance from this equipment. Vicon assumes no responsibility for poor performance when cables other than those recommended, or equivalent, are installed. In all cases, coaxial cable impedance should be 75 ohms.

Materials

Use only a pure copper center conductor. Do not use a copper-plated steel or aluminum center conductor, as they will result in poor quality video. Solid-core bare copper conductor is the best type, where flexing and bending will be minimal. If severe bending and flexing is required for installation, use a stranded center conductor. Never exceed the manufacturers minimum bend radius specification. Use cellular (foam) polyethylene dielectric except where heavy moisture exists. For moisture conditions, use solid polyethylene dielectric cable with a heavy exterior insulation. The shield must be copper braid providing 95% or better coverage.

Cable Types

The cable types listed below are the most common 75-ohm types used. They vary in size (diameter), dielectric type and net DC resistance. The larger cable results in a lower DC resistance and better video quality, with increased difficulty in handling and installation. Let the required picture quality and cable distance provide a guide in choosing the best cable type. For cables other than the approved Vicon types below, contact the manufacturers listed below. Note that "BC" refers to bare copper and "TC" refers to tinned copper.

Recommended Coaxial Cable Types

Cable Type	Belden Type No.	Alpha Type No.	West Penn Type No.	Type Center Conductor	Type Shield and % Coverage	DC Resistance ohms/1000 ft (km)
RG-11/U	8213	9847	811,4811	14 Solid BC	BC braid (95%)	2.6 (8.5)
RG-6/U	9248	9804C	806,4806	18 Solid BC	Foil + 61% TC braid (100%)	7.5 (24.6)
RG-59/U	8281*	----	815	20 Solid BC	2 TC braids (96%)	9.9 (32.5)
RG-59/U	9259	9803	816	22 Stranded BC	BC braid (95%)	15.0 (49)
RG-59/U	9659	----	----	22 Stranded BC	BC braid (95%)	15.0 (49)

*Requires special BNC-M connector due to 0.305 nominal O.D.

Belden Inc.

<http://www.belden.com/>

(800) 235-3361

Alpha Wire Company

<http://www.alphawire.com/>

(800)-52 ALPHA (522-5742)

West Penn Wire

<http://www.westpenn-cdt.com/>

(800)-245-4964

Picture Quality vs. Cable Length

Picture Quality	Maximum Cable Run** ft (m)		
	RG-59/U	RG-6/U	RG-11/U
Usable picture	1100 (350)	1500 (450)	2400 (750)
Clean picture	820 (250)	1000 (300)	1600 (500)
Best picture	400 (120)	530 (160)	820 (250)

** For longer cable runs, use a Vicon Video Amplifier to obtain a suitable picture.

Vicon Standard Equipment Warranty

Vicon Industries Inc. (the "Company") warrants your equipment to be free from defects in material and workmanship under Normal Use from the date of original retail purchase for a period of three years, with the following exceptions:

1. VCRs, all models: Labor and video heads warranted for 120 days from date of original retail purchase. All other parts warranted for one year from date of original retail purchase.
2. Video monitor CRT (cathode ray tube) and LCD monitors, all models: One year from date of original retail purchase.
3. Uninterruptible Power Supplies: Two years from date of original retail purchase.
4. VDR-304, VDR-308 and VDR-316 Recorder Series: One year from date of original retail purchase.
5. V5616MUX: One year from date of original retail purchase.
6. S10-CH: 18 months from date of original retail purchase.
7. Normal Use excludes prolonged use of lens and pan-and-tilt motors, gear heads, and gears due to continuous use of "autopan" or "tour" modes of operation. Such continuous operation is outside the scope of this warranty.
8. Vicon Security Management Systems (SMS) All Models: All hardware is warranted for two years from date of original retail purchase.

Date of retail purchase is the date original end-user takes possession of the equipment, or, at the sole discretion of the Company, the date the equipment first becomes operational by the original end-user.

The sole remedy under this Warranty is that defective equipment be repaired or (at the Company's option) replaced, at Company repair centers, provided the equipment has been authorized for return by the Company, and the return shipment is prepaid in accordance with policy.

The Company will not be obligated to repair or replace equipment showing abuse or damage, or to parts which in the judgment of the Company are not defective, or any equipment which may have been tampered with, altered, misused, or been subject to unauthorized repair.

Software supplied either separately or in hardware is furnished on an "As Is" basis. Vicon does not warrant that such software shall be error (bug) free. Software support via telephone, if provided at no cost, may be discontinued at any time without notice at Vicon's sole discretion. Vicon reserves the right to make changes to its software in any of its products at any time and without notice.

This Warranty is in lieu of all other conditions and warranties express or implied as to the Goods, including any warranty of merchantability or fitness and the remedy specified in this Warranty is in lieu of all other remedies available to the Purchaser.

No one is authorized to assume any liability on behalf of the Company, or impose any obligations on it in connection with the sale of any Goods, other than that which is specified above. In no event will the Company be liable for indirect, special, incidental, consequential, or other damages, whether arising from interrupted equipment operation, loss of data, replacement of equipment or software, costs or repairs undertaken by the Purchaser, or other causes.

This warranty applies to all sales made by the Company or its dealers and shall be governed by the laws of New York State without regard to its conflict of laws principles. This Warranty shall be enforceable against the Company only in the courts located in the State of New York.

The form of this Warranty is effective November 25, 2008.

THE TERMS OF THIS WARRANTY APPLY ONLY TO SALES MADE WHILE THIS WARRANTY IS IN EFFECT. THIS WARRANTY SHALL BE OF NO EFFECT IF AT THE TIME OF SALE A DIFFERENT WARRANTY IS POSTED ON THE COMPANY'S WEBSITE, WWW.VICON-CCTV.COM. IN THAT EVENT, THE TERMS OF THE POSTED WARRANTY SHALL APPLY EXCLUSIVELY.

Vicon Part Number: 8006-9010-03-06 Rev 1108

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